

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application. Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Listing of Claims:

1. (currently amended) A tangible computer-readable medium having stored thereon computer-executable instructions for implementing a ~~shell program that exposes an application programming interface for customizing a customizable visual user interface for a telephony device withon~~ a screen display of a telephony device, the customizable visual user interface comprising:

~~an application program selection area, including user interface controls for selecting application programs for providing services to a user on the telephony device;~~

~~a call slip area, including a call slip user interface for displaying telephone line state information;~~ shell program that exposes an application programming interface for customizing the customizable visual user interface; and

~~a customizable area including at least one user interface element enabling a user to compose e-mail via the telephony device;~~ message center operatively connected to the shell program for providing access to a user message; and

a telephony module for managing telephony functions;

wherein the application programming interface exposed by the shell program comprises one or more methods, the application programming interface receiving input from an application, and wherein execution of ~~for customizing the customizable area;~~
and

~~wherein at least one of the one or more methods of the application programming interface is responsive to the input from the application for customizing the customizable visual user interface area is for adding one or more custom panes to the visual user interface for the telephony device, the one or more panes associated with a parent application separate from the shell program, the parent application operable to communicate with the shell program via the application programming interface.~~

2-46. (canceled)

47. (New) The computer-readable medium of claim 1 wherein the telephony module includes an operator agent for determining a media mode of an incoming call.

48. (New) The computer-readable medium of claim 47 wherein the operator agent further hands the incoming call to the message transport based on the media mode.

49. (New) The computer-readable medium of claim 48 wherein the operator agent is implemented as a Protected Service Library (PSL).

50. (New) The computer-readable medium of claim 48 wherein the message transport includes at least one of an answering machine transport, an e-mail transport, a voice transport, a fax transport, a call slip manager, a telephony container, and a voice-mail transport.

51. (New) The computer-readable medium of claim 48 wherein the message transport includes a call slip manager that exposes a call slip manager application programming interface, the call slip manager including at least one object.

52. (New) The computer-readable medium of claim 51 wherein the at least one object has at least one function associated with the call slip manager application programming interface, and wherein the call slip manager further exposes the call slip manager application programming interface for accessing the at least one function of the at least one object.

53. (New) The computer-readable medium of claim 52 wherein the other processes are capable of communicating with the at least one object via the application programming interface of the call slip manager.

54. (New) The computer-readable medium of claim 52 wherein the at least one object includes at least one pane encapsulated in the at least one object.

55. (New) The computer-readable medium of claim 54 wherein the at least one pane includes at least one of a summary status pane, a call information pane, and a control pane.

56. (New) The computer-readable medium of claim 55 wherein the at least one pane includes a control pane and wherein the control pane further includes at least one of a call slip control pane and an implementer supplied call slip control pane.

57. (New) The computer-readable medium of claim 56 wherein the at least one pane includes the control pane and the control pane includes the implementer supplied call slip control pane and wherein the implementer supplied call slip control pane includes an OEM call slip control.

58. (New) The computer-readable medium of claim 52 wherein the call slip manager application programming interface includes an ICallSlip interface and wherein the at least one function includes one of a function for sliding the object on the display screen, responding to telephony events, communicating changes in line state, and communicating changes in line information.

59. (New) The computer-readable medium of claim 54 wherein the at least one pane exposes a pane application programming interface, wherein the pane application programming interface receives input from a user and wherein the display appearance of the at least one pane is modified based on the input.

60. (New) The computer-readable medium of claim 59 wherein the at least one pane receives an interface pointer associated with the corresponding at least one object.

61. (New) The computer-readable medium of claim 60 wherein the at least one object provides a service corresponding to the interface pointer to the corresponding at least one pane.

62. (New) The computer-readable medium of claim 1 wherein the message transport includes at least one object having at least one function and including at least one pane encapsulated in the at least one object on the visual user interface and wherein customizing comprises adding one or more panes to the visual user interface for the telephony device.

63. (New) The computer-readable medium of claim 62 wherein the one or more panes added to the visual user interface is associated with a parent application separate from the shell program.

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64. (New) The computer-readable medium of claim 63 wherein the parent application is operable to communicate with the shell program via the application programming interface.
65. (New) The computer-readable medium of claim 1 wherein the customizable visual user interface further comprises a message transport for receiving the user message and a message viewer for outputting the user message.
66. (New) The computer-readable medium of claim 65 wherein the message transport executes in the background separately from the shell program.
67. (New) The computer-readable medium of claim 66 wherein the message transport includes a telephony application.
68. (New) The computer-readable medium of claim 66 wherein the message transport includes a voice transport for receiving an incoming call from an operator agent.
69. (New) The computer-readable medium of claim 68 wherein the voice transport further creates and manages an outgoing voice call.
70. (New) The computer-readable medium of claim 1 wherein the telephony module comprises one of an operator agent, a telephone monitoring application, a transport, a call slip manager, and a call slip program.

71. (New) The computer-readable medium of claim 70 wherein the telephony module includes a call slip manager, the call slip manager providing a second application programming interface for receiving input from an implementer, new slip components being incorporated into the module based on the input received at the second application programming interface.
72. (New) The computer-readable medium of claim 1 wherein the shell program provides a framework of the customizable visual user interface on the screen display of the telephony device.
73. (New) The computer-readable medium of claim 1 wherein the shell program provides services and receives input from an application via the application programming interface exposed by the shell program.
74. (New) The computer-readable medium of claim 73 wherein the services provided by the shell program includes an event scheduling service.
75. (New) The computer-readable medium of claim 1 wherein the shell program incorporates a custom application program via the application programming interface exposed by the shell program.
76. (New) The computer-readable medium of claim 75 wherein the custom application program invokes a platform service of the shell program through the application programming interface exposed by the shell program.
77. (New) The computer-readable medium of claim 76 wherein the custom application program includes a third party application.

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78. (New) A method of creating a customizable visual user interface for a telephony device with a screen display, the method comprising:

providing, on one or more tangible computer-readable media, software comprising computer-executable instructions for customizing the customizable visual user interface, the customizable visual user interface comprising a branding area for displaying a brand graphic, wherein the branding area is operable to allow a user to connect to an internet location via the telephony device, and wherein the internet location is associated with the brand graphic;

wherein the software for customizing the customizable visual user interface comprises at least one application programming interface comprising one or more methods for adding one or more custom panes corresponding to a parent application to the customizable visual user interface, the at least one application programming interface exposed by a shell program;

wherein the software for customizing the customizable visual user interface is provided by a first software provider to a second software provider; and

wherein customization of the customizable visual user interface is performed by the second software provider using the application programming interface.

79. (currently amended) A method for developing software to run on a telephony device, the method comprising:

- receiving, on one or more tangible computer-readable media, a software platform comprising computer-executable instructions for displaying a user interface on a display screen of the telephony device, wherein the software platform includes a shell program that exposes a programmatic programming interface operable to provide functionality for customizing the user interface;

- receiving default user interface program modules that each display default user interface elements in the user interface; and

- creating a custom user interface program module, wherein the custom user interface program module uses the programmatic programming interface operable to provide functionality for customizing the user interface and displays a custom user interface element in the user interface, the custom user interface element associated with a parent application not included in the received software platform or the received default user interface program modules.

80. (previously presented) The method of claim 79 further including:

- enumerating the custom program module in a data structure of an operating system to enable the software platform to identify the custom user interface element and add the custom user interface element to the user interface.

81. (previously presented) The method of claim 79 including:

- receiving a set of application programs associated with the default user interface elements; and

- for a selected default user interface element, selecting an associated application program from the set to be loaded onto and executed in the telephony device;

wherein the associated application program uses the selected default user interface element as a user interface.

82. (previously presented) The method of claim 81 wherein the default program modules include a message program module for displaying a user interface for a message center application program in a message pane;

wherein the message center application program communicates state changes to the message program module, and wherein the message program module updates the message pane to reflect the state changes.

83. (previously presented) The method of claim 82 wherein the state changes include arrival of a fax, email, or answering message, and the message program module updates the message pane by displaying an indicator of the arrival of the message.

84. (currently amended) A tangible computer readable medium having programming modules that control display of a user interface of a screen phone, the programming modules including:

a shell program for controlling display of a user interface on a display screen of the screen phone, wherein the shell program exposes a programmatic programming interface operable to provide functionality for customizing the user interface;

default pane programs that each control display of default panes in the user interface, at least one of the default pane programs providing a user interface for a parent application program;

wherein the parent application program communicates state changes to a corresponding default pane program, and the corresponding default pane program updates the default pane to reflect the state changes; and

wherein the programmatic programming interface provides one or more methods for creating one or more custom panes for display in the user interface, the custom panes associated with one or more parent applications outside the shell program.

85. (currently amended) A method of developing software for a customizable visual user interface for a telephony device with a screen display, wherein the customizable visual user interface comprises:

a message area for displaying a visual indicator of fax, e-mail, or answering machine messages, the method comprising:

providing, on one or more tangible computer-readable media, software comprising computer-executable instructions for implementing default elements of the customizable visual user interface and customizing the customizable visual user interface to a custom software implementer;

wherein the software for implementing default elements of the customizable visual user interface and customizing the customizable visual user interface comprises one or more application programming interfaces comprising one or more methods for customizing the visual user interface, wherein at least one of the one or more application programming interfaces is exposed by a shell program and comprises a method for adding a custom pane corresponding to a parent application to the customizable visual user interface.

86. (previously presented) The method of claim 85 wherein the customizable visual user interface further comprises a branding area for displaying a brand graphic.

87. (currently amended) A computer-implemented method for providing run-time customization of a user interface of a telephony device, the method comprising:

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at run-time of the user interface, accepting an indication that a new user interface element is to be added to the user interface of the telephony device; and
responsive to the accepting, adding the new user interface element to the user interface of the telephony device;
wherein the accepting facilitates customization of the user interface of the telephony device at run-time of the user interface; and
wherein the new user interface element is associated with a parent application separate from a shell program implementing default elements of the user interface.

88. (previously presented) The method of claim 87 wherein the accepting is accomplished via a programmatic programming interface, the method further comprising:

via the programmatic programming interface, accepting an indication that the new user interface element is to be registered for receiving messages related to the new user interface element.

89. (currently amended) A telephony device comprising:

a screen display;

a computer-readable medium; and

a user input device;

wherein the computer-readable medium has stored thereon a software platform comprising:

computer executable instructions for displaying a graphical user interface for the telephony device on the screen display; and

an application programming interface operable to enable customization of the graphical user interface during run-time of the graphical user interface;

wherein the customization comprises adding one or more new user interface elements associated with a parent application separate from the software platform.

90. (currently amended) A method of communicating between a pane program and a shell program in a telephony device, wherein the shell program is operable to display a user interface for the telephony device, the method comprising:

providing a pane identifier in a function call, wherein the identifier is associated with a new pane to be added to the user interface, the new pane associated with the pane program, wherein the pane program is separate from but in communication with the shell program; and

in response to the providing, creating an instance of the new pane in the user interface;

wherein the function call calls a function in a programming interface exposed by the shell program, and wherein the programming interface facilitates customization of the user interface.

91. (currently amended) A tangible computer-readable medium having stored thereon software for implementing a customizable visual user interface for a telephony device with a screen display, the visual user interface comprising:

- an application program selection area, including user interface controls for selecting application programs;

- a call slip area, including a call slip user interface for displaying telephone line state information; and

- a customizable area including at least one user interface element enabling a user to activate an internet browser application program to access an online directory service;

- wherein the software for implementing a customizable visual user interface comprises at least one application programming interface comprising one or more methods for customizing the customizable area, the at least one application programming interface provided by a shell program implementing default elements of the visual user interface; and

- wherein at least one of the one or more methods for customizing the customizable area is for adding one or more custom panes to the visual user interface for the telephony device, the one or more panes associated with a parent application separate from a the shell program implementing default elements of the visual user interface.